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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/533,917

10/11/2005

Jason Mark Grech

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EXAMINER

GODENSCHWAGER, PETER F

ART UNIT

PAPER NUMBER

4134

MAIL DATE

DELIVERY MODE

10/29/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/533,917

Applicant(s)

GRECH ET AL.

Examiner

Peter F. Godenschwager

Art Unit

4134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 5/6/2005, 3/21/2006, 5/25/2006.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 21 and 24 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase “of up 250 ppm” in claims 21 and 24 is indefinite. For the purposes of further examination it will be interpreted as meaning “of up to 250 ppm.”

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

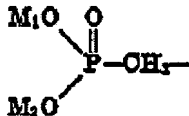
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17, 19 and 23-25 rejected under 35 U.S.C. 102(b) as being anticipated by Kautsky (US Pat. No. 3,738,937).

Regarding Claims 17 and 19: Kautsky teaches a method consisting of adding a compound of formula:

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where Y = , and M<sub>1</sub> and M<sub>2</sub> may be hydrogen to a water line, pump, boiler or hot water heater (water systems made with metal) (1:60-2:10 and 2:55-65).

Regarding Claims 23-25: Kautsky further teaches that the concentration of the compound can be from 10 ppm to 200 ppm which teach the ranges of claims 23-25 (12:1-5).

Claims 17 and 23-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Zakikhani et al. (EP Pub. No. 0,780,406).

Regarding Claim 17: Zakikhani et al. teaches the method of addition of a copolymer of vinylidene-1,1-di-phosphonic acid (vinylidene diphosphonic acid) and vinyl sulphonic acid in a ratio of 1:1 or 1:2 to mild steel in water (a water system) for the prevention or corrosion (Pg. 6, Lns. 20-40, and Pg. 11, Example 23, compounds 152DRW91 and 152DRW92).

Regarding Claims 23-25: Zakikhani et al. further teach adding the copolymer in a concentration of 50 ppm, which is a species of the ranges of claims 23-25 (Pg. 11, Example 23, compounds 152DRW91 and 152DRW92).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 18 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kautsky as applied to claim 17 above, and further in view of Shreir et al. (Corrosion (3rd Edition), 1994, Volumes 1-2).

Kautsky teaches the method of claim 17 as set forth above.

Regarding Claim 18: Kautsky does not teach adding the oligimer to a metal before it is contacted with water. However, it is well known in the art to optimize the amount of result effective variables such as the concentration of inhibitor (including a neat concentration) (MPEP 2144.05 (II)). At the time of the invention, a person of ordinary skill in the art would have found it obvious to optimize the concentration of corrosion inhibitor added to the water system, including a neat concentration, and would have been motivated to do so because Shreir et al. teaches that the initial concentration of corrosion inhibitor should be higher than during normal

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operation in order to counter the effects of an initial drop off of inhibitor lost due, for example, to protective film formation or reaction with contaminants (17:17 ¶3).

Regarding Claims 20-22: Kautsky in view of Shreir et al. render the method of claim 18 obvious as set forth above. Kautsky further teaches that the concentration of the compound may be from 10 ppm to 200 ppm which teach the ranges of claims 20-22 (12:1-5).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached form PTO-892.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter F. Godenschwager whose telephone number is (571) 270-3302. The examiner can normally be reached on Monday-Friday 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PFG

October 18, 2007



MARK EASHOO, PH.D.  
SUPERVISORY PATENT EXAMINER

20/02/07